

TRICHOPROSOPON THEOBALD (DIPTERA; CULICIDÆ).

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Some specimens of this interesting genus from the Canal Zone bring up again the question of synonymy.

The species under consideration is quite possibly new, and as such is described below, but there is a certain amount of uncertainty on the subject arising from the following conditions. The specimens were compared with all the available descriptions and coincided with none, then they were taken to the National Museum where, what I believe to be identical specimens were found, but which H. D. & K. had referred to and described as *Culex digitatus* (*Joblotia digitatus*) Rondani, and Theobald's *Trichoprosopon nivipes* was reduced to a synonym under this species. Of course the original description by Rondani is, as are all short descriptions, too indefinite to be of much value, and Theobald's description of *nivipes* does not cover these specimens unless the note under "Observations" at the end of his description modifies it sufficiently to do so. At all events, my specimens have, in eight males, always the distal tarsal joint of the mid-legs and the apex of the fourth point, brown, as will be seen below. The specimens in the National Museum show the same condition, and the very tip of the distal joint in the female is also brown. It may be, of course, a local variation, as Theobald's specimens came from Trinidad, and mine from the Canal Zone, but Theobald speaks of his species having "pure white" joints, and it seems quite unlikely that he could have included *purely brown* under that wording. Whether the species be *digitatus* is, of course, open to question, but it seems possible that there may be some closely allied species. At all events I do not think these specimens from the Canal Zone are *nivipes*, and at the risk of adding to the synonymy I am describing these as:

Trichoprosopon Wilsoni sp. nov.

Head dark, covered with flat dark scales having deep (cobalt) blue to white iridescence, and a line of dark forked-scales at the nape, two heavy chaetæ projecting forward between the eyes and some shorter ones behind the eyes; proboscis dark, long, of uniform

width, dark highly iridescent (blue-greens to copper colored) scales, the apex at times almost white, labellæ dark; palpi dark, very slender, as long or slightly longer than the proboscis, unplumed, apical joint acuminate; antennæ light stemmed, with narrow dark bands, and heavily dark verticelled, two rows in each whorl, the slender apical joints at times appearing white; the first joint testaceous and rather heavily scaled on the median aspect; clypeus dark, heavily clothed with, and having a heavy fringe of dark hairs; eyes dark turning to copper color.

Thorax pro-thoracic lobes sub-lateral, with flat scales, probably brown, but with brilliant blue to white iridescence, and a few short dark bristles; mesonotum dark with flat closely appressed golden to bronze scales on the cephalo-laterad portion, a few dark bristles on the median line at the nape, and the rest of the mesonotum covered with dark brown spindle-shaped or broadly curved scales, and short brown bristles on the lateral margins and at the wing joints; the scutellum is light testaceous, clothed with dark flat scales having blue (cobalt) to white iridescence, six bristles on the mid-lobe and two to four (apparently variable) bristles on the lateral lobes; metanotum dark brown with a small bunch, probably about ten short, dark bristles at the median apical point and about four rows of flat scales with blue to white iridescence extending from these bristles to the base of the metanotum on the median line; pleura light, well clothed with brilliant white (silvery) small flat scales.

Abdomen covered with dark brown scales having brilliant (cobalt) blue iridescence that in some lights runs toward mauve, but seems not to lose the blue entirely at any time. There are large light golden lateral spots, rather heavier at the apex of the segments, and the same color extends on the venter which is markedly banded with dark scales on the apex of most of the segments. The apical joints are definitely bristly, and the bases of the claspers rather heavily scaled.

Legs, coxæ and trochanters light scaled, but with a narrow blue band; femora are as a whole dark dorsally, the scales having a brilliant blue to purplish iridescence, and the ventral aspect has light yellow to copper colored (or bronze) scales sometimes extending well toward the knee joint, all are heavily scaled at the apex forming a bunched effect. The remainder of the fore legs is

all dark with the brilliant iridescence found on the femur. On the mid-legs the tibiæ have the same dark iridescent scales except at the base where there is a small white spot, more easily seen on the ventral aspect; the first tarsal is dark, the second is mostly white but has a few dark scales, or they show dark reflections on the dorsal aspect, the third is also mostly white except the tip which is dark and on the dorsal side there may be a few scattered dark scales, the fourth joint is practically dark on the dorsal aspect and either whitish or ringed black and white on the ventral side, depending on the position of the light, while the fifth joint is usually wholly dark, but may show light reflections on a few scales, on some specimens, depending on the angle of the light. The ungues on the fore- and mid-legs are large, unequal and simple. On the hind legs the tibiæ are dark save for a brilliant white spot at the base, and so are the first tarsals but the white spot is much smaller, the second and third joints are dark, and the fourth and fifth are pure white (in some specimens a dirty white) with occasionally a tiny dark spot at the extreme tip. There is a line of porrect scales on the distal half of the tibia, extending on the first tarsal (H. D. & K.'s "scraper"?).

Wings are long and slender (285-50), the membrane clear and the veins clothed with "Tæniorhynchus" like scales, those on the costa, subcosta, and the fork of the second long vein almost obvate, and having a brilliant blue iridescence; the cells are very long and slender (80-5). First submarginal nearly one-third the length of the wing. The stems are proportionally short, not over one-fifth the length of the first submarginal and that of the second posterior slightly longer; the cross veins are nearly in a line, the mid and posterior about equal in length. The halteres have the base very light, but most of the stem and the knob are dark.

Length: 6-6 mm.

Taken: December 1, Larvæ found in a coconut shell.

Habitat: Chagras Camp, Las Cascades, Canal Zone.

The species lies near *nivipes* and of course may be *digitatus* but is believed to be new, in spite of the fact that what seems to be the same female is described by H. D. & K. as *digitatus* and the peculiarities of the male mid-legs are not referred to.

Colonel W. H. Wilson, M. C., who sent me the specimens says they are markedly canabalistic, the larvæ eating not only the young of other species, but even the smaller members of their own species.